Tips for Preparing a Successful Shared Instrumentation Grant Proposal

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CFAC Directors November 20, 2015

Program Announcements

- **Shared Instrumentation Grant** (SIG) PAR-15-088
- Maximum award $600,000

- **High End Instrumentation Grant** (HEI) PAR-15-118
- $600,000 to $2MM

- Reviewed together by specialty
- Due date: May 25, 2015

- A new announcement is released each year
- This contains all the instructions
- READ THE INSTRUCTIONS!!

- Exists to support existing NIH funded projects.

Submitting a successful application

Successful Submission

Successful Funding

Research Projects	Instrumentation Plan
Biosketches, Other Support, Supporting letters	Equipment description

REVIEW CRITERIA

REVIEW CRITERIA

1. Justification of Need

2. Technical Expertise

3. Research Projects

4. Administration

5. Institutional Commitment

GRANTSMANSHIP:

Write to the Reviewer

Be Concise

Be Organized

Be Persuasive

REVIEW CRITERIA

1. Justification of Need
2. Technical Expertise
3. Research Projects
4. Administration
5. Institutional Commitment

Justification of Need

Who needs this equipment? – How many NIH-funded grants (or PIs) will benefit?

What else is at the University/Locally? Explain why your users cannot access additional instrumentation if it is nearby.

Deeply explain how each component is necessary for the user base. At least half of the users will need any 'add-on' before it will be funded.

Justification of need

- Describe why you are purchasing this instrument:
  - Lack of instrument at the institution
  - Adding capacity to existing instrumentation (justify need by showing actual hours of usage of existing instruments)
  - Replacing aging instrument

- Use a table to show which PIs will use which functionality

- Biggest error: Choosing the wrong instrument

Technical Expertise

Detail who is responsible for the instrumentation installation, user training, and upkeep

- Tell who is running the shop. Detail their qualifications

- How is their funding covered?

- How will user training be performed/monitored?

Include Director and all core personnel

Research Projects

- Define Major and minor users.
- Major users and NIH funded (RO1 or PO1) and heavy users of the instrumentation.
- Minor users are not NIH funded and/or will use the instrumentation only nominally.
- Major users must account for at least 75% of the usage.

Major User Research Projects

- List name, project title, NIH grant funding including dates.
- Summarize the overall goals of the lab and funded projects.
- Show data from the lab using similar instrumentation locally or with collaborators to show that **existing projects** will benefit as soon as the instrumentation arrives.
- Explain specifically how the new capability will be incorporated into the research project. Include basic experimental design.
- **Reviewers will not be reviewing the fundability or feasibility of the research project, but the impact that the instrumentation will have on advancing the research program of the investigator.**

Administration

- Outline how the Shared Resource will be managed. Discuss reservation/billing system

- If it is new instrumentation into an existing core, detail core organization and how the new instrumentation will compliment other services. Will there be an outreach program to increase usage?

- Detail administrative oversight – core facility advisory committee (name individuals and their rank)

- Include DETAILED biosafety plan for use of instrumentation and letter from EHS !!

Institutional Commitment

•Highlight how the institution has

1. Supported cores at the institution
2. Supported your core in the past
3. Will support the new instrumentation

A letter of institutional support is required.

Plan ahead: Contact Annabelle Stein, Mike Topal and Jennifer Brennan if you plan on submitting a SIG. You need their assurance that support will be available or your application will not get funded.

Equipment Description

- Describe the equipment
- Explain the need (lead in to Justification section in Instrumentation Plan)
- Explain why you selected this particular instrument, list other options and what evaluation process you went through to select this make/model.
- Justify add-ons (reference specific investigators and research projects)
- Include Quote from manufacturer
- Budget – 5-year time line of how the instrument will be supported (recharge/institutional funds)

Letters of Support

Institutional support – letter from Vice Dean of Research.

Letter from department chair if new space is needed

Letter from Biosafety/EHS approving any biosafety plan for the instrument

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Successful Funding

REVIEW CRITERIA

Review and Scoring

- NIH uses an Impact Scoring system
  - 10 is essentially perfect
  - 20-30 Outstanding – Excellent
  - 40-50 Very Good (few minor deficiencies)
  - 60-70 Good
  - 80-90 Major deficiencies
- Applications are scored by 2 reviewers prior to the panel meeting.
  - The top half of the applications are discussed (lowest scores)
  - Applications that are not discussed are not given a score (ND)
- Final scores are given at the meeting by all panelists and average is the final score.
- All applications receive a Summary Statement 2-3 weeks following the review session

Dates to remember

- 2015 Due date – May 29, 2015
- Scientific Review – August to November
- Council Review - January 2016
- Earliest start date – February 2016

More things to consider

- Develop a timeline for submission
- Share this timeline with your PI investigators and departmental grant administrator.
- Assign due dates for critical sections
  - 70 hours to write and assemble the application
  - Include 2-3 extra weeks for colleagues/scientific advisory board members to review and give you feedback
  - Include time to address their feedback

NC Biotech Center IDG

- Institutional Development Grant
- Maximum award: $200,000, requires minimum 25% match from institution
- 2015 deadline was Oct 7 for spring 2016 funding
- Solicitations once per year

Review Criteria

- **Justification:** Extent the facility/equipment would: o Build upon existing institutional strengths in biotechnology. o Stimulate broad-based development of innovative biotechnology research at the institution and in the field. o Attract outside recognition for the institution's activities in biotechnology. o Increase competitiveness for federal funding. o Be immediately useful for a broad range of biotechnology research programs. o Have potential for commercial or economic return to North Carolina.

- **Innovation:** Innovativeness of research objectives.

- **Logic and feasibility** of research projects and the administrative plan.

- **Investigators:** Thorough knowledge of the current state of the field.

- **High probability of success** taking into account staff qualifications, management plan, availability of space and equipment, projected timetable, etc.

- Justified need for Biotechnology Center support.

- **Budget** sufficient but not inflated

Actual review criteria

- **Project plan logical/feasible**? Thorough knowledge of the current state of the technology/impact on biotech research/innovative research objectives?

- Contribution to institutions Biotech initiative **builds on existing strengths/attracts** outside recognition/increase competitiveness for federal funding/stimulates broad-based biotech research?

- **Justification** for funding need/choice of equipment is appropriate and necessary for proposed projects?

- **Budget** sufficient but not inflated? Matching funds available?

Not requested but expected:

- Long term plan for administration and financial support

- How will equipment be maintained in peak condition?

- Expertise and experience of staff

- Show that the equipment has had a 'test drive' either through a demo or visit to other institution.

- Letter of support from colleagues with this equipment who will help with implementation.

- Plan for expanding usage.

NCBC IDG

Proposals with any of the following features will be more competitive:

- Shows that the request is occurring within the context of an institutional initiative.
- Involves **new ideas** that may lead to biotechnology breakthroughs.
- **Involves collaboration** between academic and industrial scientists.
- **Strengthens** regional and statewide biotechnology capabilities.

Arrange for external reviewers before you submit

- This is one of the most important things you can organize!!

- Find 1-2 people inside or outside of your organization who can give you a critical review. This can save you an whole year.

- Give them enough time to read it and give you feedback. Give yourself enough time to address the feedback.

- Your application should go out to external reviwers no less than 6 weeks before the deadline.

NIH Recommended Pre-submission Timeline:

Months

| -8 | -7 | -6 | -5 | -4 | -3 | -2 | -1 | 0 | +1 |

Receipt date
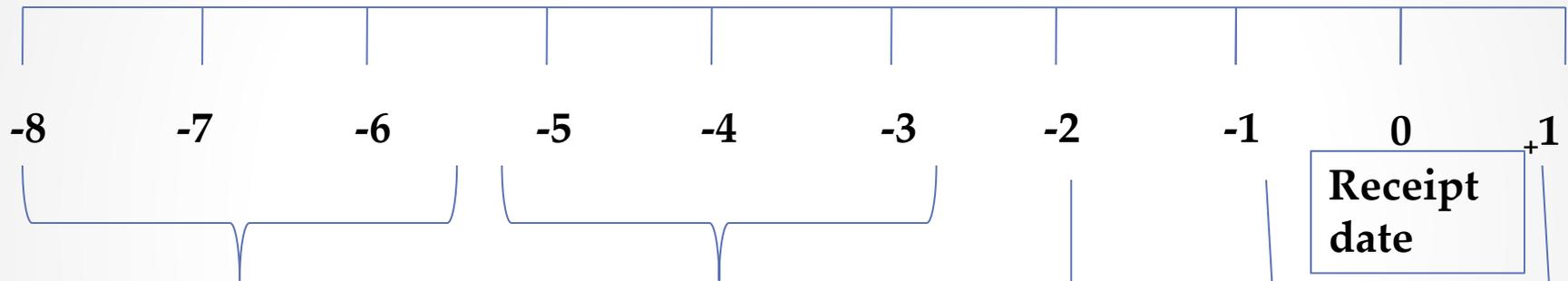
- Assess user base, available instrumentation, resources
- Brainstorm ideas, contact program staff

- Assemble application draft: Projects, Instrumentation Plan, Equipment description

- Get feedback
- Edit
- Proofread

- Meet institutional deadlines

- Track application in eRA Commons

Grantsmanship

- At the same time,
- Repeat important information in multiple places so the reviewer does not miss it.

Project Narrative

↓

Abstract

↓

Equipment Description

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Instrumentation Plan
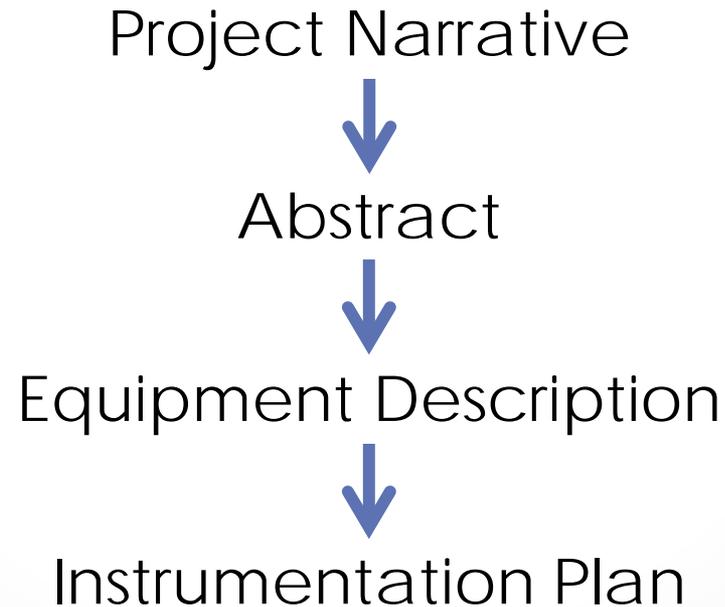
A Criticism is a gift

Reviewers area not adequately compensated for their reviewing time. Be sure to respect the time they are taking to read your grant by being clear and concise.

Read review comments carefully

Use this as an opportunity to improve your application – like having a free SAB member!

Take each critique to heart – even if you don't agree with it, RESPECTFULLY offer your alternate opinion with evidence to back your story

In your resubmission, you are expected to address any reviewer criticisms of the prior application.

Other Do's and Don'ts

❑ DO start early, carefully read the funding announcement instructions – they supersede the SF424 R&R instructions

❑ DO communicate with your Program Official often

❑ DON'T schedule your vacation to start a week before the deadline, or even the day after

❑ DO track your application daily until it is assigned an institute and study section

❑ DO 'pull the plug' if it's not ready. Better to wait one cycle and submit a great proposal than waste a submission with a incomplete or poorly planned application.

Communication!

- **Understand agency mission.**
- **Review Funding Opportunity Announcements (FOAs).**
- **Contact Agency Staff to discuss your research idea, the outcome of your review, any challenges and opportunities.**

Preparation – Review - Funding

Program Staff – Review Staff – Grants Management

Faculty Development Awards available to Core Directors

Junior Faculty Development Awards and Senior Faculty Competitive Research and Scholarly Leaves

Text: [+] [−] | [🖶]

The University will accept applications each fall for Junior Faculty Development awards, paid from IBM and R.J. Reynolds Industries funds, and for competitive Senior Faculty Research and Scholarly Leaves paid from Kenan, Pogue, William R. Kenan, Jr., William N. Reynolds, and R.J. Reynolds Industries funds. Please follow the links below for more information.

- Junior Faculty Development Awards: The Provost's Office is now accepting applications for competitive Junior Faculty Development Awards paid from IBM and R.J. Reynolds Industries funds. Instructions for these applications can be found by clicking here.

- Senior Faculty Research and Scholarly Leaves: The Provost's Office is now accepting applications for competitive Senior Faculty Research and Scholarly Leaves for Academic Year 2016/2017. Information for these applications can be found by clicking here.

http://provost.unc.edu/announcements/competitive-research-page/

NCI research Specialist Award

PAR-16-025

Provides salary support for research projects – not restricted to Faculty (can be lab manager or core manager, for instance):

http://grants.nih.gov/grants/guide/pa-files/PAR-16-025.html

Deadline is Feb 9, 2016

Start date is Oct 2016

questions?